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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,255

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Kurt E. Thiessen

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EXAMINER

MOUTTET, BLAISE L

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,255	Applicant(s) THIESSEN ET AL.	
	Examiner Blaise L Mouttet	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☒ Claim(s) 55-57 is/are allowed.
- 6) ☒ Claim(s) 1, 7, 8, 12, 14, 17-19, 23, 24, 33, 37, 38, 44, 49, 50, 58, 62, 63, 69, 73 and 74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 2-6,9-11,13,15,16,20-22,25-32,34-36,39-43,45-48,51-54,59-61,64-68,70-72 and 75.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

- i.) A method, computer readable media, inkjet printer or system including an operation with an inkjet printer wherein the operation comprises a printing operation in which ink is applied to an intended print medium (no comparable drawing, claim 2 representative).
- ii.) A method including an operation with an inkjet printer wherein the operation comprises a memory management operation to assist the inkjet printer in its operation (no comparable drawing, claim 3 representative).
- iii.) A method including an operation with an inkjet printer wherein the operation comprises selecting one or more compression/decompression algorithms (no comparable drawing, claim 4 representative).
- iv.) A method, computer readable media, inkjet printer or system including an operation with an inkjet printer wherein the operation comprises a service related operation, spitting operation, wiping operation or capping operation (no comparable drawing, claims 7 and 8 representative).

Applicant's election of species iv in the reply filed on November 22, 2004 is acknowledged. Because applicant did not distinctly and specifically point out any errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

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The applicant has listed claims 7, 8, 14, 17, 18, 23, 24, 37, 38, 49, 50, 55, 56, 57, 62, 63, 73, and 74 as readable on the elected invention with claims 1, 12, 19, 33, 44, 58, and 69 being generic. Claims 2-6, 9-11, 13, 15, 16, 20-22, 25-32, 34-36, 39-43, 45-48, 51-54, 59-61, 64-68, 70-72, and 75 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim.

Specification

2. The abstract of the disclosure is objected to because of the word "comprise" which is considered legal terminology and inappropriate for an abstract. It is suggested that "comprise" be replaced with --include--.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 7, 8, 12, 14, 17-19, 23, 24, 33, 37, 38, 58, 62, and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Coffy et al. US 5,806,994.

Coffy et al. discloses, regarding claim 1, a method comprising:

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monitoring a production line (figure 1 shows a production line for mail) for non-printing events (the non-printing events correspond to passage of envelopes through sensor module 500 as explained in column 4, line 56 – column 5, line 3); and

responsive to detecting an event (corresponding to the detection of the passage of envelopes through the mail machine), ascertaining whether an operation can be effected with an inkjet printer stationed along the production line (in figure 6A, step 656 it is ascertained whether or not the wiping and capping of the inkjet head of the printer in step 662 can be effected by checking if $C2 < 30$. If $C2 \geq 30$ a wiping and capping of the printhead is scheduled as explained in column 10, lines 30-51).

Regarding claims 7 and 8, the operation comprises a wiping and capping operation (i.e. servicing operations) of the printhead (figure 6B, step 662).

Regarding claims 12, 17, 18, 33, 37, and 38, the method as explained above is carried out by computer readable media within microprocessors (300) (column 7, lines 38-63).

Regarding claim 14, the operation “can comprise” a wiping operation in an event of an unexpected production line stoppage since it is disclosed that wiping is utilized when a certain time period (30 seconds) is expired (figure 6B, step 662) and if a production line stoppage occurred more than 30 seconds would pass without a print request (see figure 6A, steps 656 and 657) thus resulting in the wiping (figure 6B, step 662).

Regarding claims 19, 23, 24, 33, 37, and 38, the method as explained above is carried out with a sensor module (500) that performs the monitoring and is associated

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with a media feed station (rollers 450), which is provided separately from the printing station (100, figure 1).

Coffy et al. discloses, regarding claims 58, 62, and 63, an inkjet printer comprising:

means for effecting inkjet printing on a print medium (100, column 6, lines 20-25);

and

one or more computer readable media and one or more processors, wherein computer-readable instructions embodied on the computer readable media cause the processor to perform the method as explained above (column 7, lines 38-68).

4. Claims 69, 73, and 74 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchida et al. US 5,912,680.

Uchida et al. discloses, regarding claim 69, a system comprising:

a production line (the conveyor station of figure 3 is representative of a production line) comprising:

multiple stations (print media input section 204, different colored printing stations 220, and print media output station 241), each printing station having an inkjet printer (i.e. printhead) (column 4, lines 53-62);

multiple sensors (223, 224) operatively associated with the black and cyan printing stations (figure 3, additional sensors are also suggested to be associated with the middle printing stations for magenta and yellow in column 7, lines 22-31); and

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a production line monitoring component (control unit 500, figure 8) operatively associated with the production line and configured to monitor the multiple sensors and responsive to monitoring the sensors, effecting an operation with the inkjet printer (as column 6, line 48 – column 7, line 21 explains, when a jam is detected with the sensors printing is halted and the conveyor belt is cleaned).

Regarding claims 73 and 74, the operation comprises a wiping servicing of the conveyor belt with blade 243.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 44, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffy et al. US 5,806,994 in view of Ishinaga et al. US 6,243,109.

Coffy et al. discloses, regarding claim 44, a method comprising:

monitoring, with a monitoring component (print controller 320) at a production line printing station (figure 1), a sensor (500) associated with a production line, the sensor being associated with a media feed station (rollers 450), which is provided separately from the printing station (100, figure 1) (column 4, lines 56-59); and

responsive to monitoring said one or more sensors, effecting an operation with the inkjet printer (as explained in relation to figures 6A and 6B and the abstract servicing of the printhead occurs in response to the sensed envelope feeding).

Regarding claims 49 and 50, the servicing comprises wiping and capping (figure 6B, step 662).

Coffy et al. fails to disclose that the monitoring component (i.e. print controller) is embodied within an inkjet printer.

Ishinaga et al. discloses providing a print controller for an inkjet printer so as to be integral with the printhead (abstract, figure 1). It is taught that the integration of the printer controller and the printhead leads to simpler operation and circuit construction than in cases in which the print controller is formed externally (column 2, lines 20-46).

It would have been obvious for a person of ordinary skill in the inkjet art at the time of the invention to embody the print controller of Coffy et al. within the inkjet printer as suggested by Ishinaga et al.

The motivation for doing so would have been to provide simpler operation and circuit construction as taught by column 2; lines 20-46 of Ishinaga et al.

Additional Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Maloney US 3,603,585 teaches providing spaced apart sensors in a printer and halting print operations when the sensors detect a jam.

Omori et al. US 4,019,187 teaches providing spaced apart sensors in a conveyor that prevent printing by an inkjet printer when a jam is detected.

Teraoka US 4,415,048 teaches a production line in which a printer marks the weight on a label based upon a weight detection at a weighing station.

Harris, Jr. et al. US 5,114,128 teaches printing information with an inkjet printer located at one station (40) of a production line based on bar-code information detected at a bar code reader station (58) of a production line.

Gavrilos US 5,912,979 teaches placing a plurality of sensors along a production line that includes an inkjet printer in order to determine document separation or if jamming occurs and controlling the production line accordingly.

Allowable Subject Matter

7. Claims 55-57 are allowable.

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Coffy et al. '994 teaches that the servicing of the inkjet printer occurs only **after** a predetermined time period (60, 17, or 30 seconds in the steps of figures 6A and 6B). This is in contrast to the limitations of claim 55 which include effecting the service related inkjet operations "during said time period" in response to the ascertaining step. The combined limitations of claims 55-57 are not found to be anticipated or rendered obvious by the prior art or record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet who may be reached at telephone number (571) 272-2150. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, Art Unit 2853, can be reached at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet December 15, 2004

Blaise Mouttet 12/15/2004